

Remarks

The Office Action mailed February 9, 2007 has been carefully considered. After such consideration, Claims 4 and 28; and Claims 20 and 43 have been amended to correct minor technicalities and Claims 21 and 44 have been cancelled without prejudice. In addition, independent Claim 1 has been amended to more particularly define the Applicant's present invention over the references. As such, Claims 1-11; 12-20 and 22-25; and 26-43 and 45-48 remain in the case with none of the claims being allowed.

As the Examiner will recall, the present inventions are directed to structures having a fire resistance rated, area separation wall and, more particularly, to a two-hour fire resistance rated, area separation wall for a structure having only an outer membrane on each side of the interior support structure; and a thermal insulation barrier between the outer membranes. The resulting construction is very cost effective compared to multi-panel walls having both inner and outer panels and much faster to construct.

The Examiner had objected to Claims 4 and 28; Claims 20 and 43; and Claims 21 and 44 for minor technicalities. Claims 4 and 28; and Claims 20 and 43 have been amended to correct these minor technicalities and Claims 21 and 44 have been cancelled without prejudice.

The Office Action rejected Claims 1-3 and 6-11 under 35 U.S.C. 102(e) as being anticipated by Don *et al.* In addition, Claims 12-15, 19-21 and 23-35 were rejected under 35 U.S.C. 102(e) as being anticipated by Axsom.

Also, Claim 5 was rejected under 35 U.S.C. 103(a) as being unpatentable over Don *et al.*. Claims 12-25 was rejected under 35 U.S.C. 103(a) as being unpatentable over Ojala. Also, Claim 5 was rejected under 35 U.S.C. 103(a) as being unpatentable over Don *et al.*. Finally, Claims 26-48 was rejected under 35 U.S.C. 103(a) as being unpatentable over Don *et al.* in view of Ojala. Reconsideration and allowance is respectfully requested in view of the amendments to the claims and the following remarks.

Independent Claim 1 was rejected under 35 U.S.C. 102(e) as being anticipated by Don *et al.*. The Examiner stated that gypsum is well known to have a two-hour fire resistance rating. The following section from a gypsum website shows that gypsum is only known to have a one hour fire resistance rating when only one sheet is used:

"What's the difference between "regular" and "type X" gypsum wallboard?"

ASTM C 36 designates two types of gypsum wallboard, regular and type X. Type X wallboard, which is typically required to achieve fire resistance ratings, is formulated by adding noncombustible fibers to the gypsum. These fibers help maintain the integrity of the core as shrinkage occurs, providing greater resistance to heat transfer during fire exposure.

To receive the "Type X" designation under ASTM C 36, a gypsum wallboard product must be shown to achieve not less than a one hour fire resistance rating for 5/8" board or a 3/4 hour fire resistance rating for 1/2" board applied in a single layer, nailed on each face of load-bearing wood framing members, when tested in accordance with the requirements of ASTM E 119, Methods of Fire Test of Building Constructions and materials."

<http://www.nationalgypsum.com/resources/faqs/gypboard.aspx#2>

See also, for example, U.S. Patent No. 5,481,834 to Kowalczyk where a fire resistant panel is shown which must include at least four sheets of gypsum. The present inventions are able to obtain the previously unknown two-hour fire resistance rated, area separation wall having only outer membranes by including a thermal insulation barrier between said outer membranes as now recited in independent Claim 1, as amended. Therefore, independent Claim 1 is patentable over the cited reference at least for this reason.

Independent Claims 12 and 26 were rejected under 35 U.S.C. 102(e) as being anticipated by Axsom. Axsom would not be expected to work (the metal will melt at about 1200F) but in any case it includes more than only an outer membrane since it also includes a sheet of metal on the face of the gypsum board. Therefore, independent Claims 12 and 26 are patentable over the cited reference at least for this reason.

Independent Claim 12 was also rejected under 35 U.S.C. 103(a) as being unpatentable over Ojala. As discussed above, gypsum alone does not have a two hour rating. To add the other sheet of gypsum to Ojala would be contrary to its purpose and nowhere in the specification was Applicant able to find any reference to fire resistance. Therefore, independent Claim 12 is patentable over the cited reference at least for this reason.

Independent Claim 26 was rejected under 35 U.S.C. 103(a) as being unpatentable over Don *et al.* in view of Ojala. As discussed above, gypsum alone does not have a two hour rating and to add the other sheet of gypsum to Ojala would be contrary to its purpose. Nowhere in

either specification was Applicant able to find any reference to fire resistance. Therefore, independent Claim 26 is patentable over the cited reference at least for this reason.

Claims 2-11; 13-20 and 22-25; and 25-43 and 45-48 contain the allowable subject matter of independent Claims 1, 12 and 26, as amended, respectively, and are, therefore, also allowable.

The Applicant submits that by this amendment, he has placed the case in condition for immediate allowance and such action is respectfully requested. However, if any issue remains unresolved, Applicant's attorney would welcome the opportunity for a telephone interview to expedite allowance and issue.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Edward W. Rilee', written in a cursive style.

Edward W. Rilee
Registration No.
MacCord Mason PLLC
P. O. Box 2974
Greensboro, NC 27402
(336) 273-4422

Date: May 9, 2007
File No.: 8274-020